# APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Date of filing in State Engineer's Office	JUL 28 1997	
Returned to applicant for correction		•
Corrected application filed		
Map filed	JUL 28 1997	

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The applicant Oxbow Geothermal Corporation hereby make application for permission to change the Point of Diversion and Place of Use of water heretofore appropriated under Permit 49572

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- 1. The source of water is Underground
- 2. The amount of water to be changed 5.0 CFS
- 3. The water to be used for Industrial (Geothermal) Purposes
- 4. The water heretofore permitted for Industrial (Geothermal) Purposes
- 5. The water is to be diverted at the following point SW1/4 SW1/4 Section 33, T.25N., R.37E., MDM or at a point from which the southwest corner of said Section 33 bears  $5.52^{0}$  01' 50" W., a distance of 845.68 feet. Well 37-33.
- 6. The existing permitted point of diversion is located within SW1/4 SW1/4 Section 33, T.25N., R.37E., MDM or at a point from which the southwest corner of said Section 33 bears  $S.47^{0}$  45' 42" W. a distance of 1313.55 feet. Well 27 (28)-33.
- 7. Proposed place of use NE1/4 Section 7, T.24N., R.37E., MDM
- 8. Existing place of use SW1/4 SW1/4, of Section 33, T.25N., R.37E., MDM.
- 9. Use will be from January 1 to December 31 of each year.
- 10. Use was permitted from January 1 to December 31 of each year.
- 11. Description of proposed works Drill new well and construct piping to existing gathering system.
- 12. Estimated cost of works \$2.2 Million
- 13. Estimated time required to construct works six months
- 14. Estimated time required to complete the application of water to beneficial use five years
- 15. Remarks: Produced hot water will be flashed to steam in a dual flash geothermal power plant for production of electricity in the existing Oxbow Power Plant. 80% of the produced fluid will be reinjected into the geothermal reservoir. 20% will be used consumptively through loss by evaporation in the cooling tower.

Total combined consumptive duty of geothermal fluids under permits granted to Oxbow will not exceed 10,704 acre feet annually.

By s/Dick Benoit 9790 Gateway Drive, Suite 220 Reno, NV 89511

Compared	gkl/cms	dl/bk

Protested \_\_\_\_\_

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## APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion and place of use of the water of an underground source as heretofore granted under Permit 49572 is issued subject to the terms and conditions imposed in said Permit 49572 and with the understanding that no other rights on the source will be affected by the change proposed herein.

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid diverted and consumed for a beneficial use.

The production and injection well are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection well and/or other analyses of the system used for returning the used geothermal fluids to the source must be submitted together with the Proof of Completion.

An annual report for this well must be filed under this permit describing the amount of geothermal fluid diverted and consumed to a beneficial use for the calendar year. This report must detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 3,620 acre-feet per year but the total consumptive use of the geothermal fluid is limited to only incidental fluid losses in the system and in no case shall it amount to more than 10% of the volume withdrawn annually. The State Engineer does not waive the right to make a determination of incidental fluid losses at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

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The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

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The total combined consumptive use of the geothermal fluid under Permits: 41929 (Certificate 12903), 49573 (Certificate 12904), 49802 (Certificate 12905), 49803 (Certificate 12906), 51029 (Certificate 12907), 51030 (Certificate 12908), 51031 (Certificate 12909), 51032 (Certificate 12910), 51033 (Certificate 12911), 51034 (Certificate 12912), 51035 (Certificate 12913), 51036 (Certificate 12914), 52411 (Certificate 21915), 52412 (Certificate 12916), 52951 (Certificate 13739), 54654 (Certificate 13740), 56604 (Certificate 13743), 61785, 62089, 62090 and 63284 shall not exceed 10,704 acrefeet annually.

A quarterly report for this well must be filed under this permit describing the amount of geothermal fluid diverted and consumed to a beneficial use for each month in that quarter. This report must detail the amount of fluid produced and injected.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed  $\underline{5.0}$  cubic feet per second.

Work must be prosecuted with reasonable diligence and be completed on or before:

### November 24, 1999

Proof of completion of work shall be filed before: December 24, 1999

Application of water to beneficial use shall be filed on or before: November 24, 2000

Proof of the application of water to beneficial use shall be filed on or before:

December 24, 2000

Map in support of proof of beneficial use shall be filed on or before:  $\mathbf{N}/\mathbf{A}$ 

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.,

State Engineer of Nevada, have hereunto set

this **24th** day of **November**, A.D. **1998** 

my hand and the seal of my office,

Completion of work filed JAN 2 0 2000

Proof of beneficial use filed MAR 27 2000

Cultural map filed

Certificate No. 15511 Issued AUG 0 9 2000